

**MAKING A DIFFERENCE FOR OLDER ADULTS AND THE ENVIRONMENT
FINAL REPORT
EPA AGING INITIATIVE**

Today's Date: **May 8, 2007**
Recipient (Your organization): **Kirkwood Community College**
Agreement Number: **CH-83226501-0**
Report Number (1st q, 2nd q, 3rd, final): **FINAL**
Agreement Project Period: **February 14, 2005 to October 31, 2006**
NCE granted: February 14, 2005 to February 28, 2007
Recipient Contact Person: **Debbie Mrkvicka, Grants and Contracts Officer**
Principal Investigator/Project Director: **Stefani Hanson**

I. Progress Achieved in Accomplishing Project Goals/Objectives, Outputs and Outcomes:

(Goals and objectives should correspond to the goals and objectives in the approved grant work plan. Report on progress related to outputs and outcomes discussed in your work plan.)

Repeat the format below for each project goal and or objective. Be sure to include progress towards environmental results (outcomes and outputs). Report on pre and post test knowledge if conducting educational projects. Number of older adults recruited, number of homes visited and evaluated, etc.

Goal/Objective 1: See III. Final Report for specific goals/objectives.

Planned Activities per work plan:

Goal/Objective 2: See III. Final Report for specific goals/objectives.

Planned Activities per work plan:

Goal/Objective 3: See III. Final Report for specific goals/objectives.

Planned Activities per work plan:

Actual Work Completed:

See III. Final Report for specific goals/objectives.

Budget: Compare expenditures as a percent of the project completed to the project's planned schedule. Report any equipment purchased during the reporting period.

NOTE: To review the current status of the project's budget, please refer to the FSR provided by Kirkwood Community College's Business Services office. A copy of the final FSR is attached to this report.

Discuss and Project Terms and Conditions required for this Agreement

Report any Key Personnel Changes concerned with the project:

Not applicable. This is the FINAL project report.

II. Difficulties Encountered: (As applicable, should include information on specific reasons why goals and objectives were not met, and analysis and explanations of cost overruns and high unit costs. Repeat format as needed).

Goal/Objective 1:

Problem(s) Encountered: None.

Resolution/Corrective Action Plan and Schedule: Not applicable.

Goal/Objective 2:

Problem(s) Encountered: None.

Resolution/Corrective Action Plan and Schedule: Not applicable.

Goal/Objective 3:

Problem(s) Encountered: None.

Resolution/Corrective Action Plan and Schedule: Not applicable.

III. Final Report on Project Activities over the entire project period shall describe the recipient's achievements with respect to stated project purposes and objectives.

Goal/Objective 1: Kirkwood's Environmental Training Center will prepare training content for older adults in three primary areas of environmental concern: Water, Air, Toxics and Resource Conservation. Training content will focus on (1) environmental health hazards, (2) protecting water and air from contaminants, and (3) conserving resources.

The Environmental Training Center completed instruction to Heritage staff by conveying principles and hands-on exercises to reinforce concepts of resource conservation and utilization. This training was conducted in an effort to improve capabilities and provide ongoing services to the elderly which directly results in improved health aspects. The goals of this training included:

- Participant awareness of clean air, clean water, household hazardous waste, and resource conservation requirements in order to improve respiratory health and decrease exposure to contaminants.
- Reducing personal contribution of pollutants to the environment and understanding concepts of waste minimization.
- Minimizing personal negative impact on the environment and increasing stewardship among an ever increasing demographic group.

The core training modules address Environmental Health Hazards; Safe Water; Indoor Air Quality; and, Conserving Resources and Preventing Pollution. A complete table of training presentations can be referenced in ATTACHMENT 1. Handouts summarizing the principles from the training modules (ATTACHMENT 2) were created by the Heritage staff for distribution and will be discussed in Goal/Objective 2.

Goal/Objective 2:

Kirkwood's Environmental Training Center will train six staff members at the Heritage Area Agency on Aging to deliver training content to (1) 148 Heritage Task Force Members who are older adult leaders serving as advocates in the seven counties served by Kirkwood and the Heritage Area Agency on Aging; (2) 20 case managers who will assess living conditions and coordinate intervention services to 280 older adults in the same seven county area; and, (3) directly to older adults through the Heritage Involvement Magazine which is mailed to 12,336 homes (with an additional 5,612 copies dropped off at various locations for community pick up), and the Involvement Report Television Program.

- (1) Kirkwood Environmental Training Center trained two Heritage staff members who then delivered training to 148 Heritage Task Force Members. It was determined that two trained individuals providing all the training would allow for better consistency in the information provided to others. Three separate PowerPoint® presentations were developed to convey the information to seniors with handouts for each presentation which highlighted the main points. The presentations were developed to provide basic information on the topics that could be easily shared with others in their communities. At each presentation, the task force members were asked to take handouts, share the information with family, friends, other organizations to which they belong and then report back the number of people with whom they had shared information. Examples of where the information was shared included: families, card club members, church circles, and local boards of supervisors. The handouts for each presentation are attached in ATTACHMENT 2. Local landfill or transfer station maps are included for specific counties in ATTACHMENT 3.
- (2) One of the trainers from Heritage held two training sessions for case managers and 25 were in attendance. These case managers reported that the information was valuable in identifying potential health problems as they visited people in their homes. Additionally, they were very glad to have information in addressing solutions to some of the items discussed in the training.

- (3) The information was targeted directly to older adults through Heritage's monthly periodical, *The Involvement Magazine* and the Involvement Report Television Program. Those activities were addressed in an earlier report to EPA.

Goal/Objective 3:

Heritage Task Force managers, caseworkers, and both *The Involvement Magazine* and TV program will reach a majority of older adults in the seven-county area with information about protecting their health and the environment from pollution. Case managers will conduct a minimum of 280 home health assessments that will include the new environmental assessment component now available as the result of the training received via the EPA Preparing Environmental Health & Safety Stewards project.

- (4) In order to further disseminate information during the grant extension, we worked with the local newspaper and ran ads with the basic information that we felt older adults would read and retain for future reference. The Gazette has a circulation of 70,000. Copies of those ads accompany this report are included in ATTACHMENT 4.

IV. Environmental Outcomes for Entire Project.

Each senior who attended PowerPoint® presentations completed a written evaluation that identified what their knowledge level was prior to the presentation and what they perceived their knowledge level to be after the presentation. A copy of the training evaluation which was developed by the Kirkwood Environmental Training Center is included with this report (ATTACHMENT 5). In all cases the seniors indicated that their level of knowledge on the subject had improved and they reported that they could communicate key elements. In some instances, seniors were not even familiar with the location of the landfill in their county or how to contact the landfill. That information was valuable for them to know what to do with hazardous materials that they identified. Copies of these maps accompany this report (ATTACHMENT 3).

By the conclusion of the grant, 138 seniors completed evaluations. Because of illness or other absences, several more seniors only were present for one or two of the presentations and did not complete an evaluation. These seniors reported a total of 486 direct contacts they made with others sharing the information they had learned from the presentations. For several months after these presentations were made, seniors commented on information about hazardous materials and what should be done with these types of items. There is an obvious increase in awareness among these seniors about how they can participate in reducing pollution. Providing information about the resources available for the disposal of hazardous materials should lead to safer environments in the homes of seniors and their families as well as proper disposal of these items. One outcome is the decrease in hazardous materials into local landfills.

Kirkwood Community College
Preparing Environmental Health and Safety Stewards
Agreement No: CH-83226501-0

Trained case managers have made comments about finding hazardous materials in homes when they make visits. They are now able to provide information on how to properly dispose of these items.

The newspaper ads included a number for the Heritage Area Agency on Aging, if they had further questions. Only two people responded to that request and information was shared to answer their questions.

Final Report — Additional Items. The following completed forms are attached to this report:

- SF 269: A Financial Status Report is due 90 days after the end of the award. A copy is attached; original has been sent under separate cover to EPA.
- Lobbying/Litigation 5700-53.
- MBE/WBE 5700-52a.

Signature (Recipient Authorized Official): /s/ Mick Starceвич Date: May 11, 2007
Dr Mick Starceвич, President

Attachment One

Training Modules

1. Environmental Health Hazards
 2. Safe Water and Air
 3. Conserving Resources

Training Module 1

Environmental Health Hazards

- PPCP's as Pollutants
- Human & Veterinary Drug Effects to Water
- Acute & Chronic Effects of Pesticides

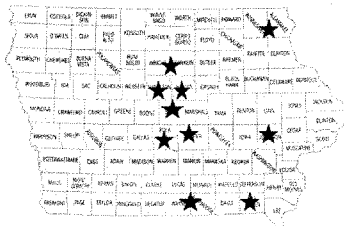


Slide 1-1

PPCP's as Pollutants

Pharmaceutical & Personal Care Products

- Safe Drinking Water Act
 - Regulates industry related chemicals-solvents, heavy metals
 - Lindane from households can quickly exceed SDWA limits
- USGS 2002 Report
 - Sampled 10 locations in Iowa



Slide1-3

Human & Veterinary Drugs Effects to Water

- Low levels still have unknown consequences
- Continual release into water systems
- Hormone disruption
 - Aquatic life
 - Small children and adults
- Production of resistant pathogens
 - Antibiotics vs humans
 - Destruction of waste water flora



Slide 1-5

PPCP's as Pollutants

Pharmaceutical & Personal Care Products

- Newly considered pollutants
- Enter aquatics through human & vet consumption
- No municipal treatment engineered for removal
- Disruption of ecosystems and endocrine functions



Slide1-2

What Are We Finding in the Water?

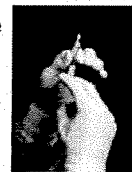
- Steroids
- Antibiotics
- Hormones
- Insect Repellent
- Fragrances
- Nonprescription drugs (OTC)
- Prescription drugs
- Antioxidants
- Disinfectants
- PAH's



Slide 1-4

PPCP Management Issues

- Convenience
 - Collection programs need to be easy and free
- Safety
 - Hazards to Health Care Workers
 - Skin Contact Hazards
 - Inhalation Hazards
 - Glass containers could spill or break
 - Reactions between substances that are combined
- Disposal Methods
 - Incineration...Incineration...Incineration
 - Permitted HazWaste or Medical Facility



Slide 1-6

PPCP Management Issues

- Privacy
 - Maintaining anonymity (HIPAA)
- Drug Abuse
 - Risk of re-issuance
 - Render drugs unusable at time of collection
- Funding
 - No existing source for residential PPCP management
- Pharmaceutical-like items
 - Vitamins & Homeopathics increase volume of waste



Slide 1-7

What Can We Do?

- Iowa currently developing pharmaceutical disposal program with RCC's
- Reverse distribution not an option
- Permitting Issues
 - Scheduled drugs and DEA registering
 - Liability in transfer for Health Care Workers
- Educate elderly and avoid flushing prescriptions
- Use trash disposal until programs exist



Slide1-9

Health Effects

- Cancer
- Leukemia
- Miscarriages
- Genetic Damage
- Behavioral Problems
- Liver Damage
- Thyroid Disorders
- Diabetes
- Neuropathy
- Asthma
- Auto-Immune Disorders (Lupus)



Slide 1-11

PPCP Management Issues

- Identification of Controlled Substances
 - Labels do not indicate regulatory status
 - DEA schedules of controlled substances
- Waste Generator Status
 - Households exempt from RCRA status



Slide1-8

Pesticides Acute & Chronic Effects

- Chemical Poisons designed to kill plants and animals
 - Insecticides (Insects)
 - Herbicides (Plants)
 - Rodenticides (Rodents)
 - Fungicides (Fungus)
- Easily absorbed through skin or inhaled
- Drinking water contamination
- Acute & Chronic Health Effects
- Essential for Modern Farming



Slide 1-10

Insecticides

- Includes Organophosphates & Organochlorines
- Cholinesterase Inhibitors
- Study in North Carolina & Iowa
- Symptoms include:
 - Headaches
 - Fatigue
 - Insomnia
 - Dizziness
 - Nausea
 - Hand Tremors
 - Numbness
 - Neurological Symptoms



Slide 1-12

Insecticides

- **Lindane**
 - Used on cattle, lumber, gardens, and head lice solutions.
 - Causes liver and kidney problems
- **Methoxychlor**
 - Used for fruits, vegetables, and livestock.
 - Causes reproductive difficulties



Slide 1-13

Fungicides

- Thiocarbamates
- Inorganic sulfur compounds
- Copper Salts and Organic Complexes
- Health Effects Include:
 - Skin irritation and allergic dermatitis
 - Possible carcinogens
 - Sensitizers



Slide 1-15

What Can We Do?

- Eliminate materials from household
- No trash disposal!
- Use Regional Collection Centers (RCC) for disposal
- Use product as intended
- Do not purchase more than needed
- Use natural based products when available

Slide 1-17

Herbicides

- **Alachlor**
 - Used to control grassy weeds in corn and soybeans.
 - Can cause eye, liver, kidney and spleen problems as well as anemia and increased risk of cancer.
- **Atrazine**
 - Used on corn and sorghum for several decades.
 - Can cause cardiovascular and reproductive problems.
- **Endothall**
 - Used on sugar beets, spinach, and potatoes.
 - Can cause stomach and intestinal problems.



Slide 1-14

Rodenticides

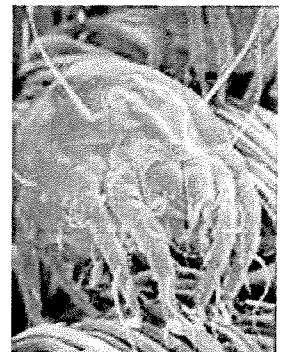


- **Strychnine**
 - Acts directly on brain cells and spine to cause convulsions
 - Blue skin color, violent convulsions
- **Sodium Fluoroacetate**
 - Extremely toxic, affects heart tissue and brain
 - Stomach pain, vomiting, hallucination, nervousness
- **Arsenic compounds**
 - Toxic to liver, kidney, brain, bone marrow, and CNS
 - Headache, burning stomach pain, vomiting, diarrhea, dizziness
 - Garlic odor on breath and feces
- **Zinc Phosphide**
 - Highly toxic, severe intestinal irritation, severe injury to liver, kidneys, CNS, and heart
 - Intense nausea, stomach pain, excitement, chills, cough

Slide1-16

Airborne Contaminants

- Dust
- Mold
- Animal Dander
- Dust Mites
- Pollen
- Radon
- Combustion Gases



Slide 1-18

Training Module 2

Safe Water & Air

Why is it important?

- Essential for our everyday life activities
- Early 1900's industrial activities not controlled
- Clean Air Act
 - 1955, 1963, 1970, 1990
- Clean Water Act
 - 1972, 1977, 1981
- Safe Drinking Water Act
 - 1974, 1986, 1996



Slide 2-1

What is Safe Drinking Water?

Private Water Supply

- No regulations for private water systems
 - Governed by Health Dept or County Sanitarian
 - Testing for coli form, nitrates, nitrites
 - Landowners responsibility
 - Lead & Copper if there are children
 - Should test every 3 years
- Xenia & CIWA considered public systems
 - Regulated by SDWA
 - Have own treatment plants



Slide 2-3



Why Drink Water?



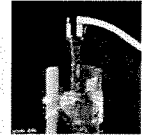
- More than half your body weight is water
- Main ingredient in blood
- Basis of the juices in digestive system
- Main ingredient in urine
- Water keeps things lubricated!!
 - Body joints
 - Mucus membranes
 - Saliva
- Water makes things move!!
 - Food through intestines
 - Wastes through colon

Slide 2-5

What is Safe Drinking Water?

Public Water Supply

- Protecting public health by regulating the nation's public drinking water supply.
 - Disease threatening micro-organisms
 - Pesticides, Insecticides, Herbicides
 - Human Wastes
 - Improperly disposed chemicals
 - Toxic metals
 - Animal Wastes
 - Particulates



http://www.epa.gov/safewater/wot/pdfs/book_waterontap_full.pdf

Slide 2-2

“Designer Water” What is it?

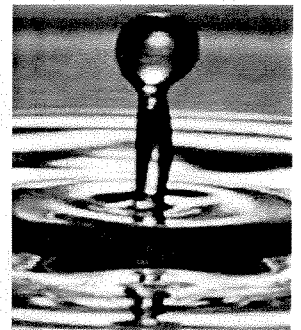
- Regulated by FDA standards
- Usually contain some of following:
 - Artificial colors & flavors
 - Minerals
 - Electrolytes
 - Vitamins
 - Juices
 - Ascorbic acid
 - Synthetic sweeteners
 - Splenda
 - Aspartame
 - Saccharin



Slide 2-4

Types of Bottled Water

- Spring Water
- Purified Water
- Distilled Water
- Mineral Water
- Sparkling Water
- Deionized Water
- Drinking Water
- Reverse Osmosis Water
- Natural Water
- Artesian Water



Slide 2-6

What Can We Do?

- Do not dispose of unwanted chemicals, or pharmaceuticals down the drain.
- Read annual wastewater reports from your area
- Test your private water sources
- Take medication with water
- Drink clean water
- Drink water everyday!



Slide 2-7

Health Effects

- Acute effects can manifest as irritation of eyes, nose, throat, headaches, dizziness and fatigue.
- Chronic effects can include asthma, hypersensitivity pneumonitis, and humidifier fever.
- Susceptibility to colds or other viral diseases



Slide 2-9

A look At Source-Specific Controls

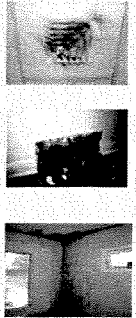
- Radon
- Tobacco Smoke
- Biological contaminants
- Stoves, Heaters, Fireplaces and Chimneys
 - Create particulates and CO
- Household products, Mothballs
- Formaldehyde
- Pesticides
- Asbestos
- Lead



Slide 2-11

Indoor Air Quality Overview

- People spend approximately 90% of their time indoors.
- Scientific evidence has shown air within homes can be more seriously polluted than outdoor air.
- Health risks can be more serious due to greater exposure.
- Most homes have more than one source of contribution.



Slide 2-8

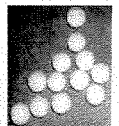
Methods for Improving Indoor Air Quality

- Three Basic Strategies
 - Source Control
 - More cost efficient appliances
 - Ventilation Improvements
 - Increase the amount of outdoor air coming indoors
 - Use exhaust fans when available
 - Air Cleaners
 - Many types, sizes on market with varying price ranges



Slide 2-10

Mothballs



- Have been used for years as pest control and an inexpensive deodorizer.
- Typically purchased in large quantities
- Placed in trunks, closets, under sofa cushions, drawers
- Mothballs contain Naphthalene
 - Poison by inhalation
 - Can cause nausea, vomiting, headaches, shortness of breath, coughing, and burning eyes
- Children can have glucose problems
- Flakes & tiny slivers will still produce fumes so discard vacuum bag immediately after vacuuming.

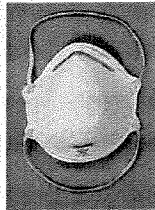
Slide 2-12



Outdoor Air Considerations



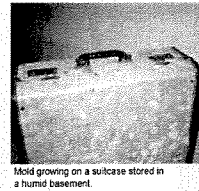
- Mowing
- Burning
- Application of Pesticides
- Dusty gravel roads
- Insect foggers



Slide 2-13

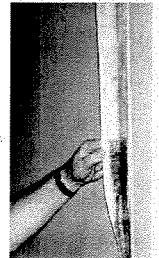
Mold, Dust, & Allergens

- Inhaling or touching mold or mold spores may cause allergic reactions.
- Responses include sneezing, runny nose, red eyes, and dermatitis.
- Molds can also cause asthma attacks in people with asthma.



It is important to take precautions to **LIMIT YOUR EXPOSURE** to mold and mold spores.

Mold growing on the back side of wallpaper.



Slide 2-14

Mold, Dust, & Allergens

- Moisture is the key to mold control
- Use air conditioners or de-humidifiers when possible
- Use exhaust fans in bathrooms or open windows



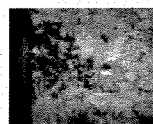
Bathroom



Room



Shower



Attic

Slide 2-15

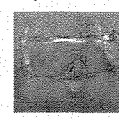
How Do I Clean it up??

- First fix leaks and other problems that have started the mold growth in that particular area.
- Scrub mold off hard surfaces with detergent and water and let dry completely.
- Remove porous (ceiling tile, carpet) and throw away.
- Do not paint over moldy surfaces!!! It will peel.
- If it is a special item (antique) consult a specialist.
- Wear protective clothing when cleaning

– Gloves,

Eye Wear

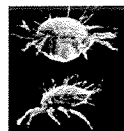
Respirator



Slide 2-16

Pollens & Dusts

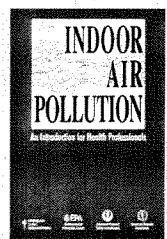
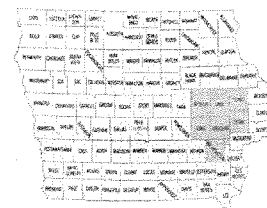
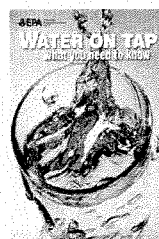
- Vacuums with HEPA filters
- Vacuum regularly
- HEPA Furnace filters
- Use Air filters or Cleaners
- Clean Bedding & Mattresses
- Keep pets clean



Slide 2-17

What Can We Do?

- Make It Safe Coalition monitors Carbon Monoxide (CO)
- County Public Health Department
 - Landlord Tenant Act (Mold)



Slide 2-18

Training Module 3

Conserving Resources

- Household Hazardous Waste
- Waste Minimization & Pollution Prevention
- Household Recycling Options



<http://householdproducts.nlm.nih.gov/products.htm>

HHW Characteristics

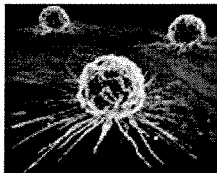
- Toxic
 - Pesticides, Expired Pharmaceuticals
- Corrosive
 - Acids
 - Bases
- Ignitable
 - Paints and Thinners
- Reactive



Slide 3-1

Toxic HHW Materials

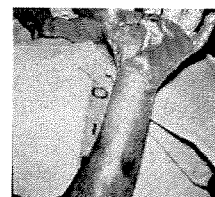
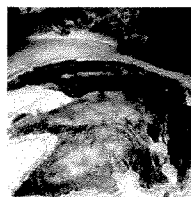
- Poisonous materials like pesticides and expired medicines can harm various organs when swallowed, inhaled, or absorbed through the skin.
- Toxic materials are also known to cause cancer.



Slide 3-2

Corrosive HHW Materials

- Materials like battery acid and bleach can dissolve other materials, including metals.
- Corrosive materials can cause severe burns to skin, eyes, and other tissue.
- Corrosive burns are significantly more damaging than thermal burns.

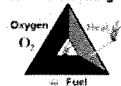


Slide 3-3

Ignitable HHW Materials

- Flammable materials like gasoline and paint thinner need only a source of ignition to burn.
- Water heaters, portable heaters, candles, faulty wiring can all be potential sources of ignition.

The Fire Triangle



Slide 3-4

Reactive HHW Materials

- Unstable materials can explode or give off poisonous gases when mixed with water or other materials.



+



=

Chlorine Gas



+



=

Poisonous Gas



+



=

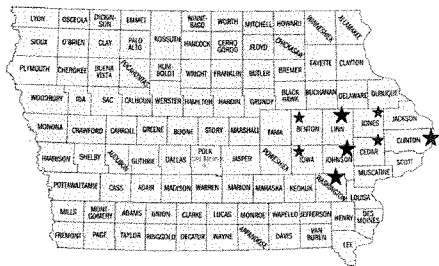
Acid Splattering



Slide 3-5

Slide 3-6

HHW Recycling Facilities



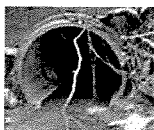
Red=RCC ★
Blue=Satellite ★

What Can We Do?

- Evaluate excess HHW's that may contribute to existing or undiagnosed health problems.
- Ascertain if excess HHW's may be posing physical hazards to elderly households. (ie. Fire hazards)
- Family member or neighbor may transport HHW's to local RCC (Regional Collection Center).
- Educate others on importance of managing HHW's



Slide 3-7

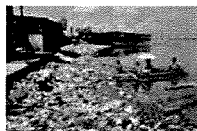
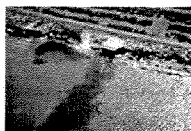


Pollution Prevention

What is it?



- Eliminating the creation of pollutants by means of source reduction.
 - More efficient use of materials
 - Protection of natural resources
 - Reducing input of wastes and contaminants into environment
 - Reduces hazards to public health
 - Housekeeping and substitution
 - Does not include recycling, treatment or disposal



Slide 3-8



Pollution Prevention

Change What You Use



- Read labels on the products and decide if there are alternatives to use that exist.
 - Water-based latex instead of solvent based paint
 - Compost instead of chemical fertilizers
 - Cedar chips instead of mothballs
 - Boric acid instead of commercial ant & roach killers



Slide 3-9

Pollution Prevention

Change What You Do

- Buy hazardous products only in the quantity you need and use the product completely. Do not buy products that take time to use just because they are on sale.
- Do not use too much of a product. More is not necessarily better, especially for the environment.
- Consider how you will dispose of the product before you purchase.

Slide 3-10



Pollution Prevention

Improve Your Housekeeping

- Store hazardous products according to the instruction on labels.
- Always keep hazardous products in their original containers.
- Make sure containers always have readable labels. If a label comes off make a new label or use a marker.



Slide 3-11

Slide 3-12

Attachment Two

Handouts

1. Environmental Health Hazards
2. Safe Water
3. Indoor Air Quality
4. Conserving Resources and Preventing Pollution

Environmental Health Hazards

1. Pharmaceuticals
2. Pesticides
3. Personal Care Products as Pollutants

Implications on our Lives

Pharmaceuticals and Personal Care Products

- Products are showing up in water supply – no treatment available
- Hormone disruption
- Production of resistant pathogens
- Destruction of waste water flora
- Unknown effects because of too little research being completed



Pesticides

- Necessary for modern farming
- Easily absorbed through skin or inhaled
- Cause acute & chronic health effects



What can we do?

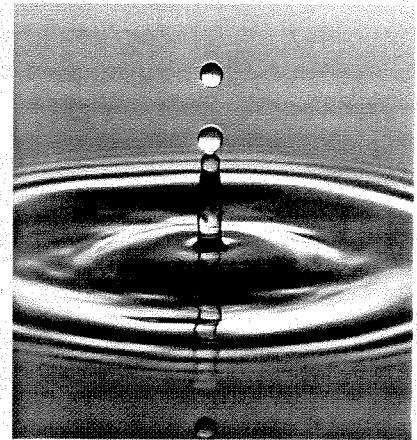
- Eliminate unused hazardous products and containers from household
- Don't put hazardous materials in trash (Use Regional Collection Centers (RCC) for disposal)
- Don't flush pharmaceuticals (wrap and place in plastic bags in trash)
- Use product as intended
- Do not purchase more than needed
- Use natural based products when available
- Wash produce thoroughly before eating

Kirkwood Community College and the Heritage Area Agency on Aging have received funding from the United States Environmental Protection Agency's Aging Initiative for the:
"Preparing Environmental Health and Safety Stewards" project.

IMPORTANT NEW INFORMATION TO SHARE ABOUT SAFE WATER

Why is Water Important To Us?

- More than half of your body weight is water.
- Water is the main ingredient in blood, digestive juices and urine.
- Water keeps body tissues lubricated.



Is Our Water Supply Protected?

Public water supply— Several laws work to protect public water, but only certain pollutants (mostly industrial wastes) are regulated and removed.

Private water supply— There is no regulation for a private water supply. It is the homeowner's responsibility. (They are suggested to test every three years.)



Is Bottled Water Better?

- Distilled water is the only type which removes everything so only pure water remains.
- Bottled water without additives is labeled by source and/or processing method, such as artesian, mineral, purified, de-ionized, de-mineralized, sparkling, well, drinking, reverse osmosis, natural, and spring.
- Numerous types of bottled water with additives of sugar, flavoring, color or other additives are referred to as designer water, and regulated by FDA, not EPA.

What Can We Do?

- Drink plenty of safe water every day! — whether publicly treated, safe private or best bottled.
- Test private water supplies for safety.
- Read water reports from your community water supply and advocate for good testing.
- Do not dispose of chemicals and pharmaceuticals down the drain.

Kirkwood Community College and the Heritage Area Agency on Aging have received funding from the United States Environmental Protection Agency's Aging Initiative for the: *"Preparing Environmental Health and Safety Stewards"* project. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s), and do not necessarily reflect the views of the United States Environmental Protection Agency. ID Number: CH-83226501-0



The Heritage Agency



IMPORTANT NEW INFORMATION TO SHARE ABOUT INDOOR AIR QUALITY

Why is Clean Indoor Air important?

- Many people spend 90% or more of their time indoors.
- Health risks can be more serious because of greater exposure.



What Pollutes Indoor Air?

Indoor pollutants include dust, mold, allergens, smoke, radon, pesticides, lead, asbestos, and hair and dander from pets.

How Do Indoor Pollutants Affect Health?

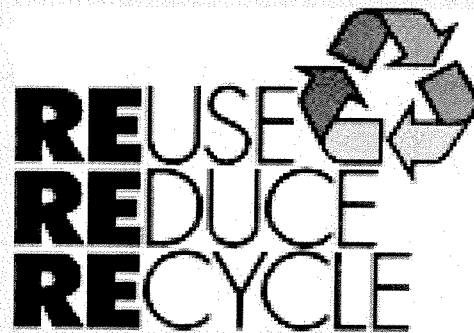
- **Immediate effects:** irritation of eyes and nose, headaches, dizziness, and fatigue
- **Long term effects:** Asthma, pneumonia, humidifier fever, cancer and susceptibility to colds or other viral diseases

What can we do?

- Vacuum often, using appliances with HEPA filters, if possible.
- Use oven and bathroom ventilators or open windows.
- Purchase air filters to clean indoor air.
- Avoid smoke from wood burning stoves and from cigarettes
- Check furnace filters annually
- Clean mold properly and eliminate moisture leaks at the source.
- When purchasing appliances, buy efficient models.

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IMPORTANT NEW INFORMATION TO SHARE ABOUT CONSERVING RESOURCES AND PREVENTING POLLUTION

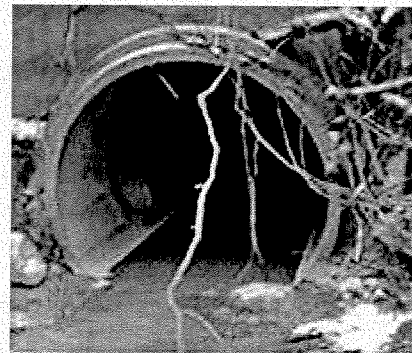


What Are Household Hazardous Wastes?

They include consumer products labeled as:

- Toxic (Pesticides)
- Corrosive (Acids or bases)
- Ignitable (Paints and thinners, gasoline)
- Reactive (Moth balls)

With enough exposure, all of these can cause skin irritation, burns, damage to organs if inhaled, or cancer.



+



=

Chlorine Gas



How Can We Prevent Pollution?

- Stop creating pollutants by reducing the source.
- Change what you use (alternatives that are less hazardous).
- Change what you do (look at quantity purchased, using the proper amounts and know how you will dispose of unused portions).
- Store only in original container and do not use containers for other purposes

What Can We Do About Environmental Health Hazards in Our Homes and In Our Water?

- Look for excess household hazardous wastes that may contribute to existing or undiagnosed health problems.
- Look for excess household hazardous wastes may that may pose physical hazards. (ie. fire or other reactive hazards).
- Take or ask a family member or neighbor to take household hazardous wastes to the local Regional Collection Center.
- Educate others on importance of managing household hazardous wastes.

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The Heritage Agency



Attachment Three

Maps

Benton County Landfill

7904 20th Ave

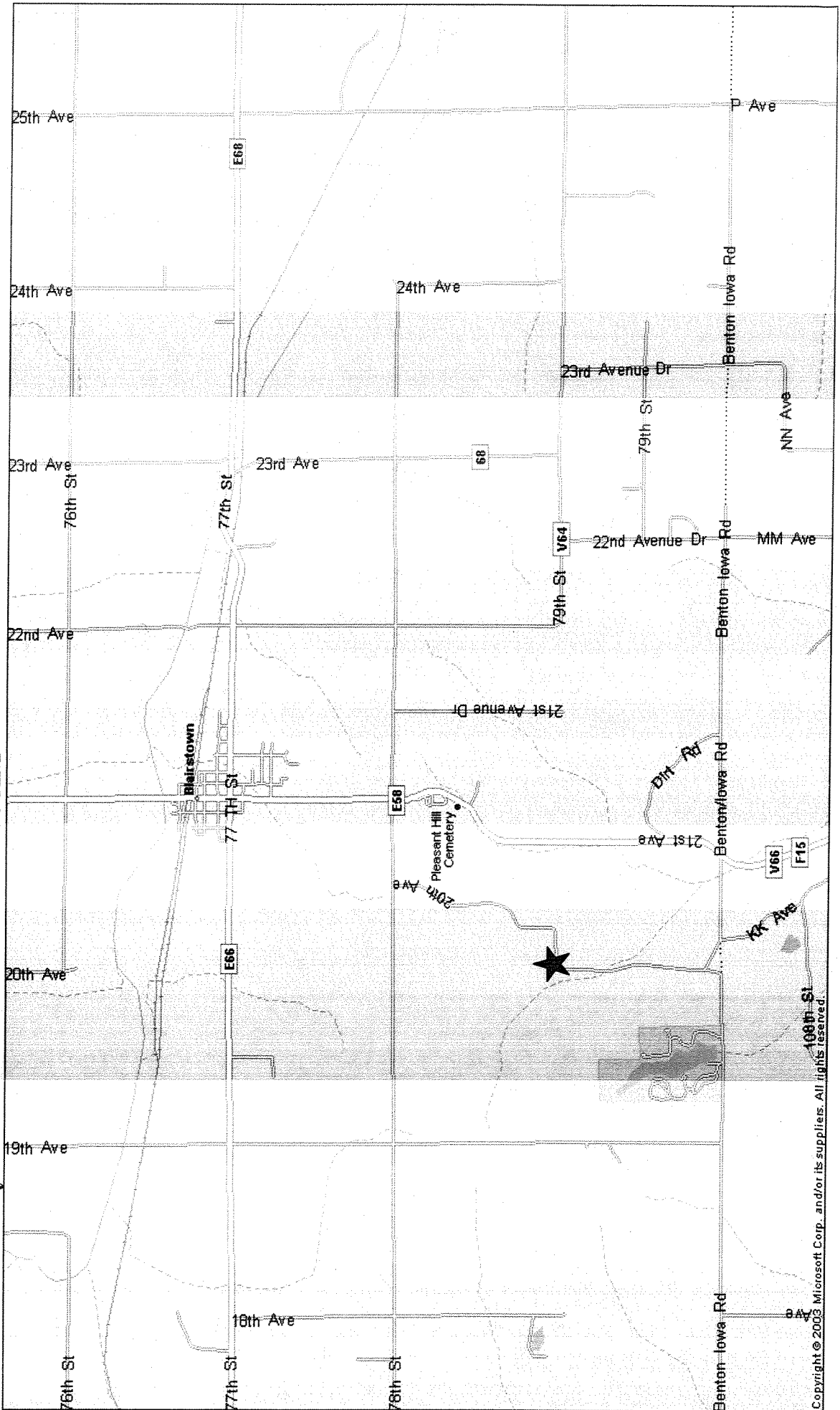
Blairstown, Iowa 52209

319-454-6392

Appointments needed

Hours: Monday-Friday 8:00 AM to 4:00 PM

1st Saturday of each month 8:00 AM to 11:30 AM



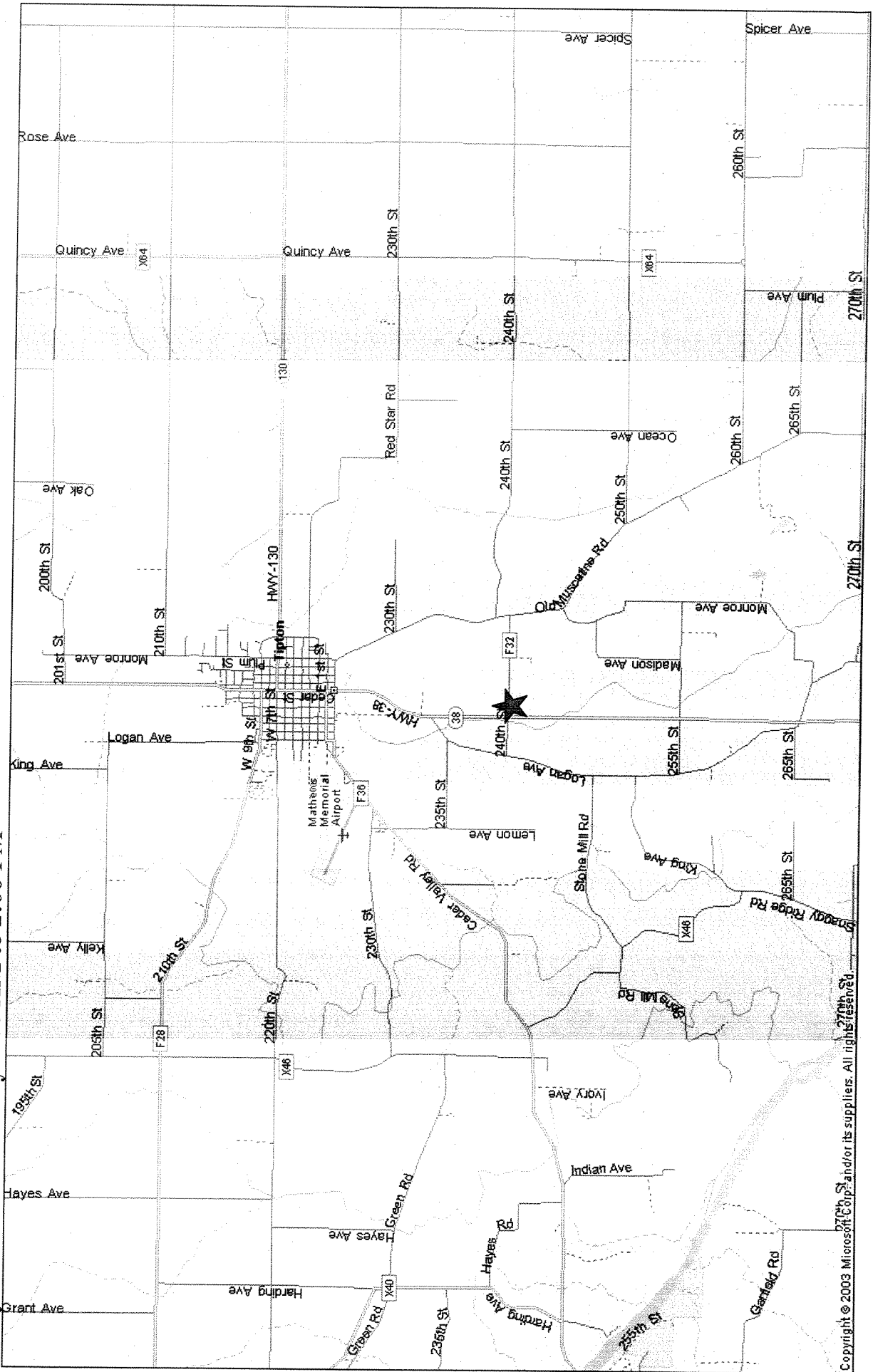
Cedar County Transfer Station

1202 240th Street
Tipton, Iowa 52772
563-886-6437

No appointment necessary

Hours: Monday-Friday 9:00 AM to 4:00 PM

Every 1st and 3rd Saturday 8:00 AM to 2:00 PM

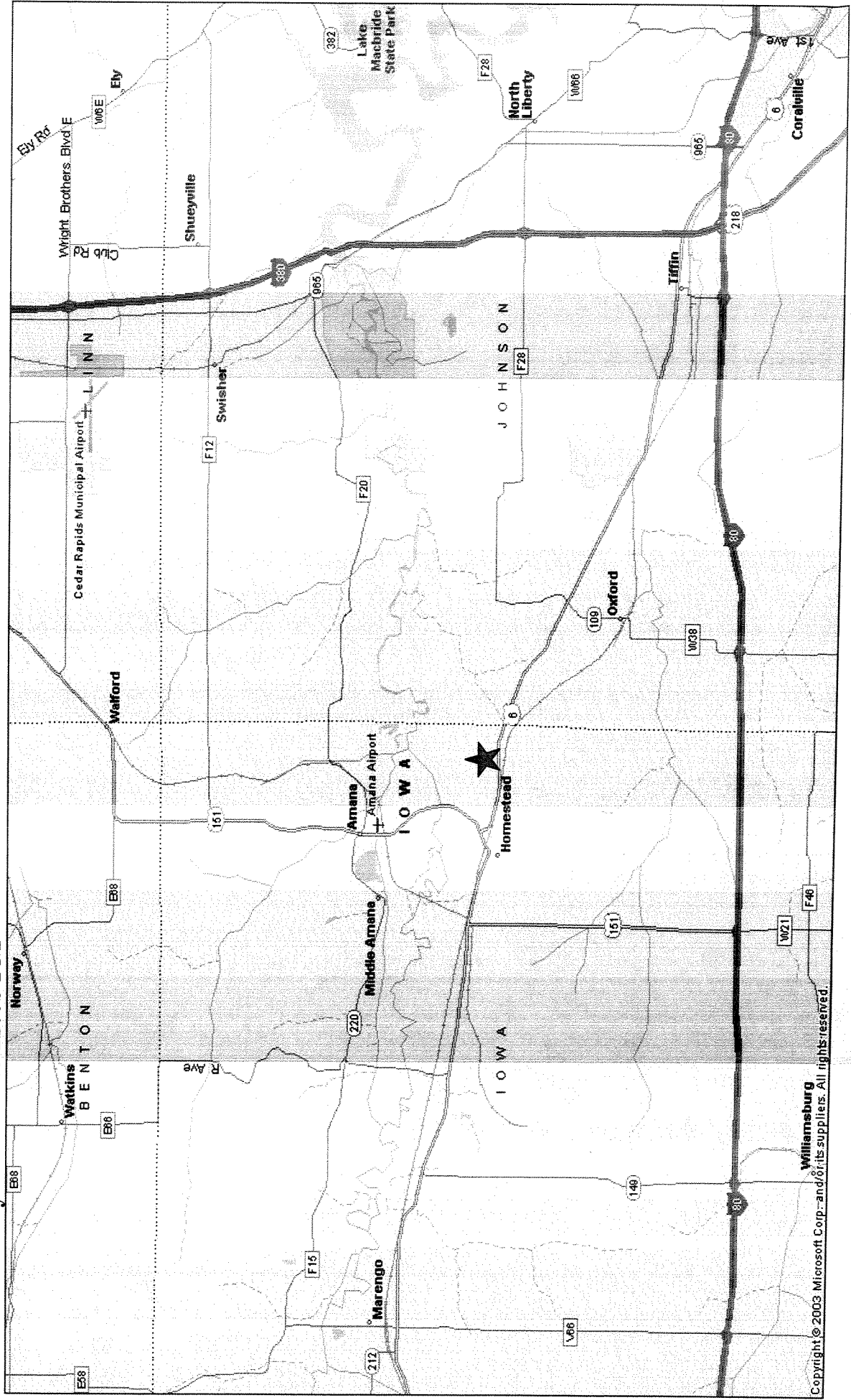


319-828-4943

Appointments needed

Hours: Monday-Friday 8:00 AM to 4:00 PM

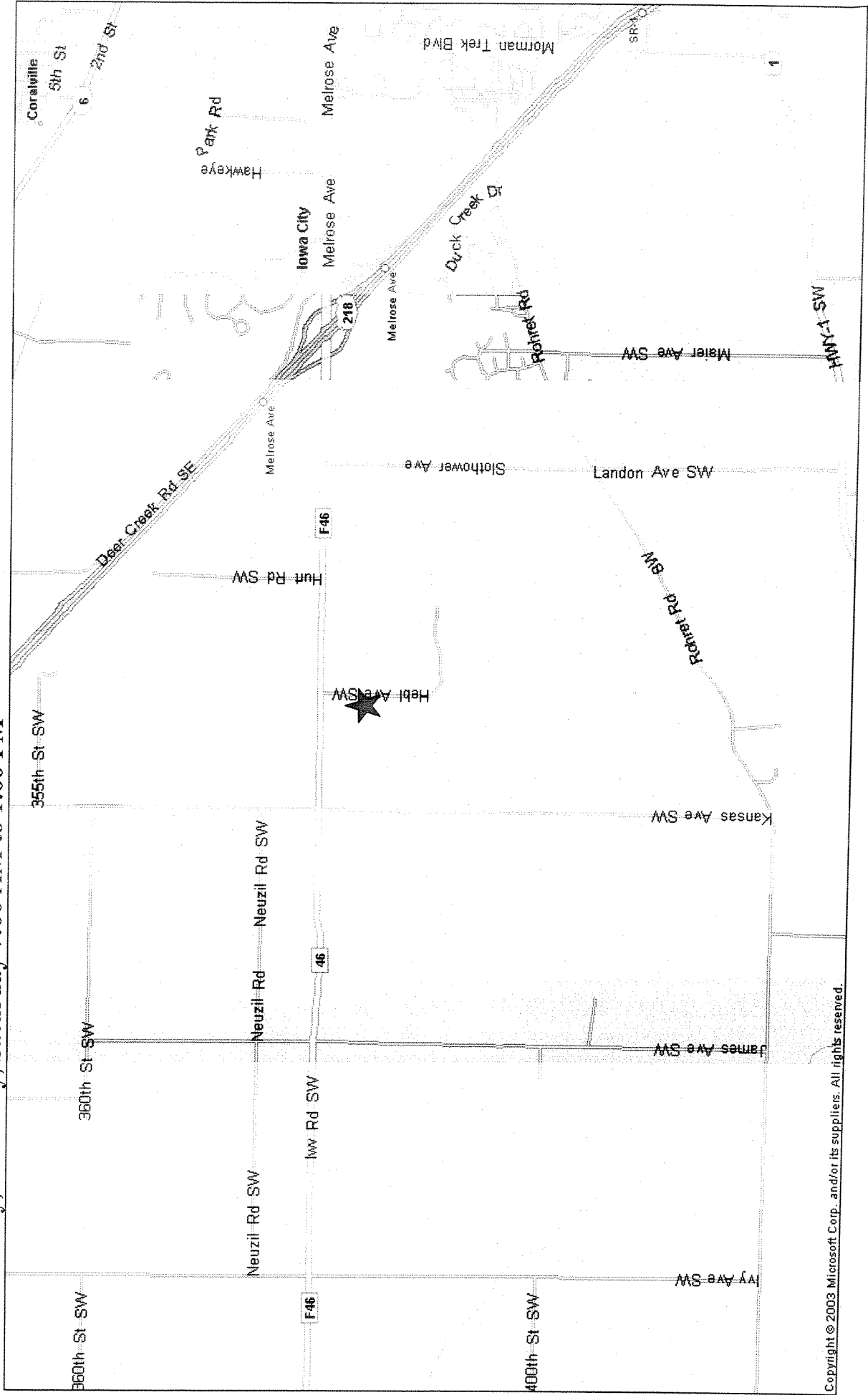
Saturday 8:00 AM to 12:00 PM



Iowa City Landfill
Servicing Johnson County
3900 Hebl Ave SW
Iowa City, Iowa 52240
319-356-5185

Appointments only

Hours: Tuesday, Thursday, Saturday 7:00 AM to 1:00 PM



Jones County Solid Waste

13859 Edinburg Road

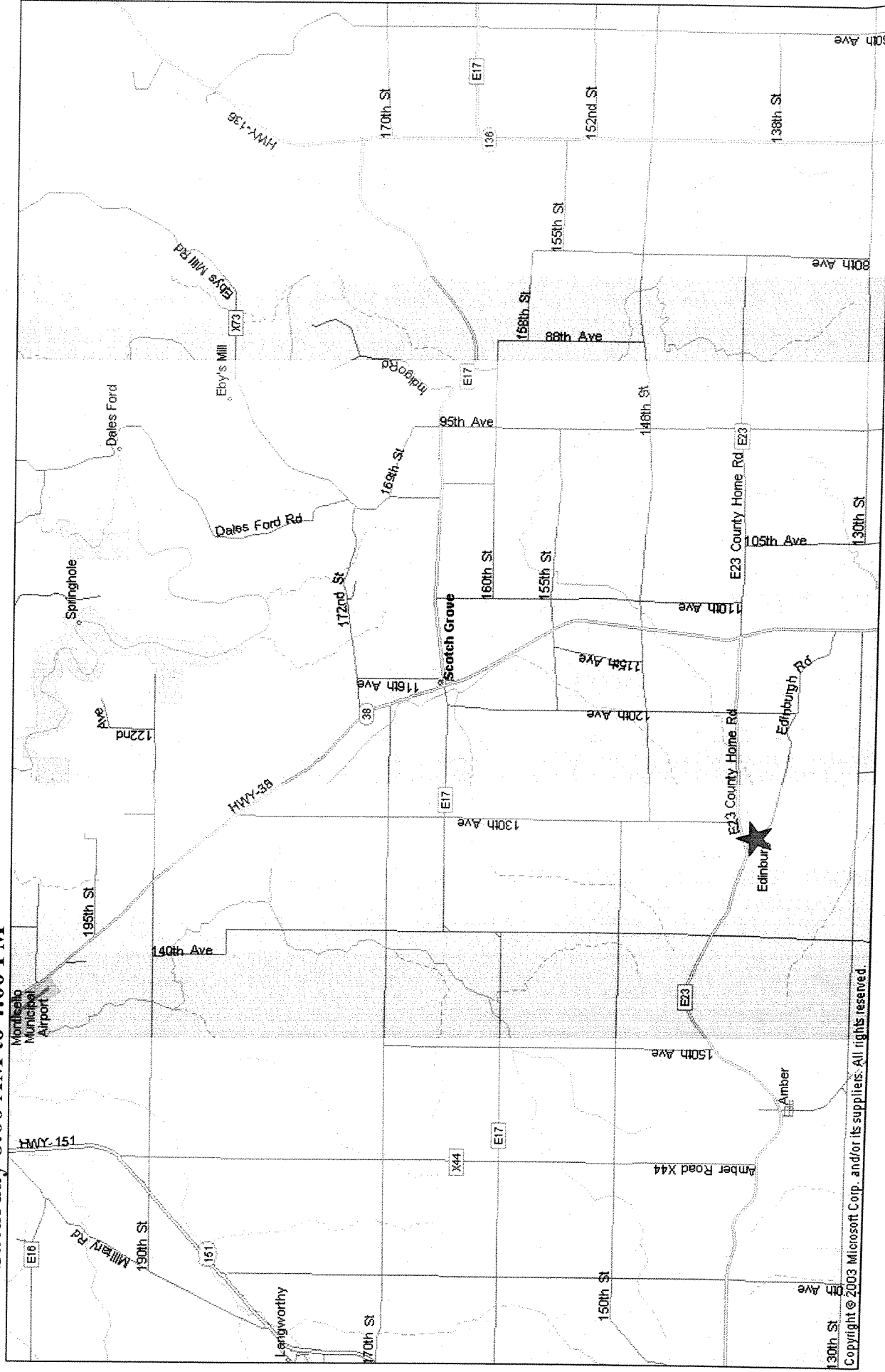
Scotch Grove, Iowa 52310

319-462-3898

No appointment necessary

Hours: Monday-Friday 8:00 AM to 3:00 PM

Saturday 8:00 AM to 4:00 PM



Linn County Solid Waste Agency

1954 County Home Road

Marion, Iowa 52302

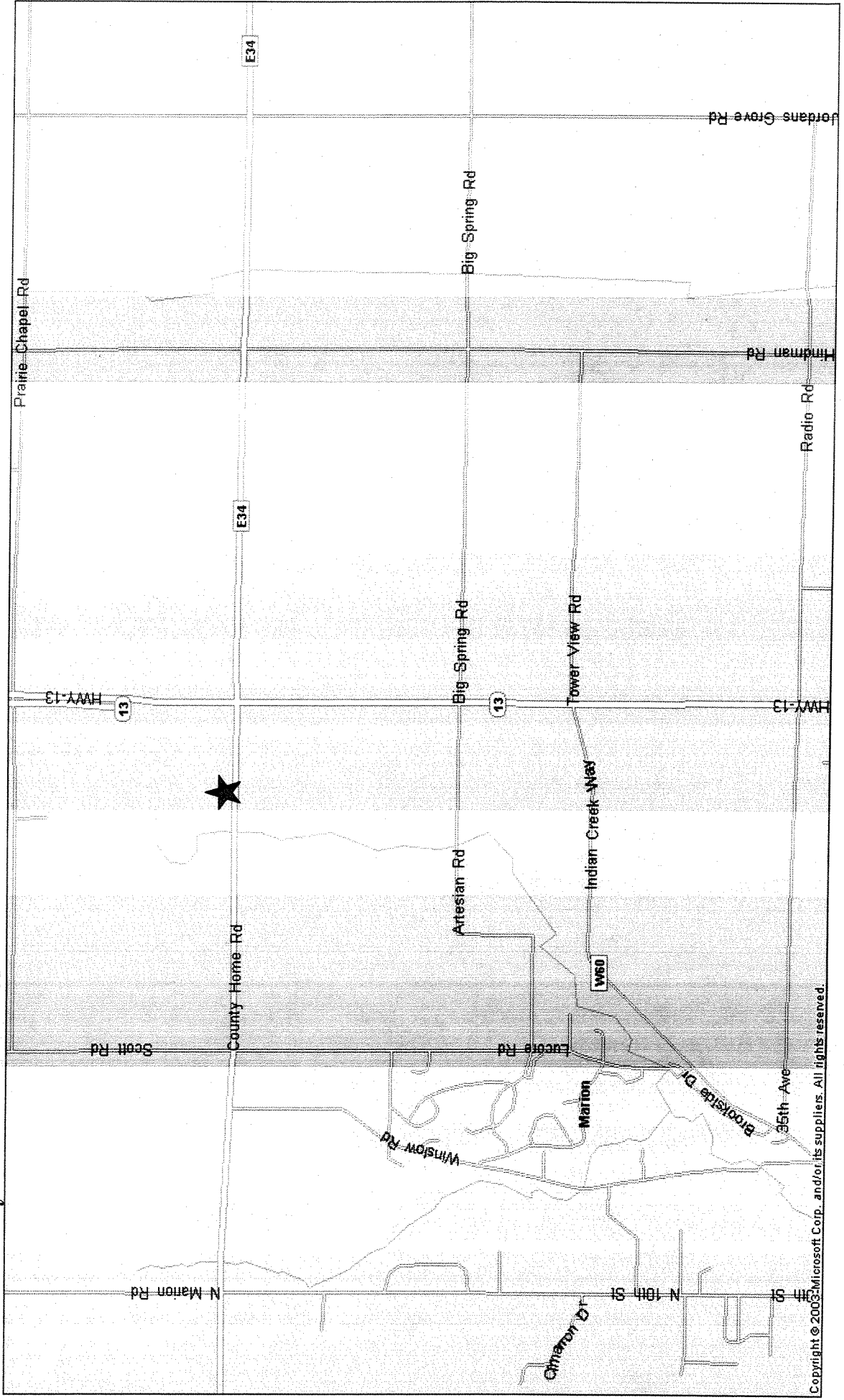
319-373-4771

Appointments needed for hazardous materials such as paints, aerosols, etc.

No appointments needed for recyclable materials such as oil, appliances, batteries, fluorescent bulbs

Hours: Monday-Friday 7:30 AM to 4:30 PM

Saturday 8:00 AM to 2:00 PM

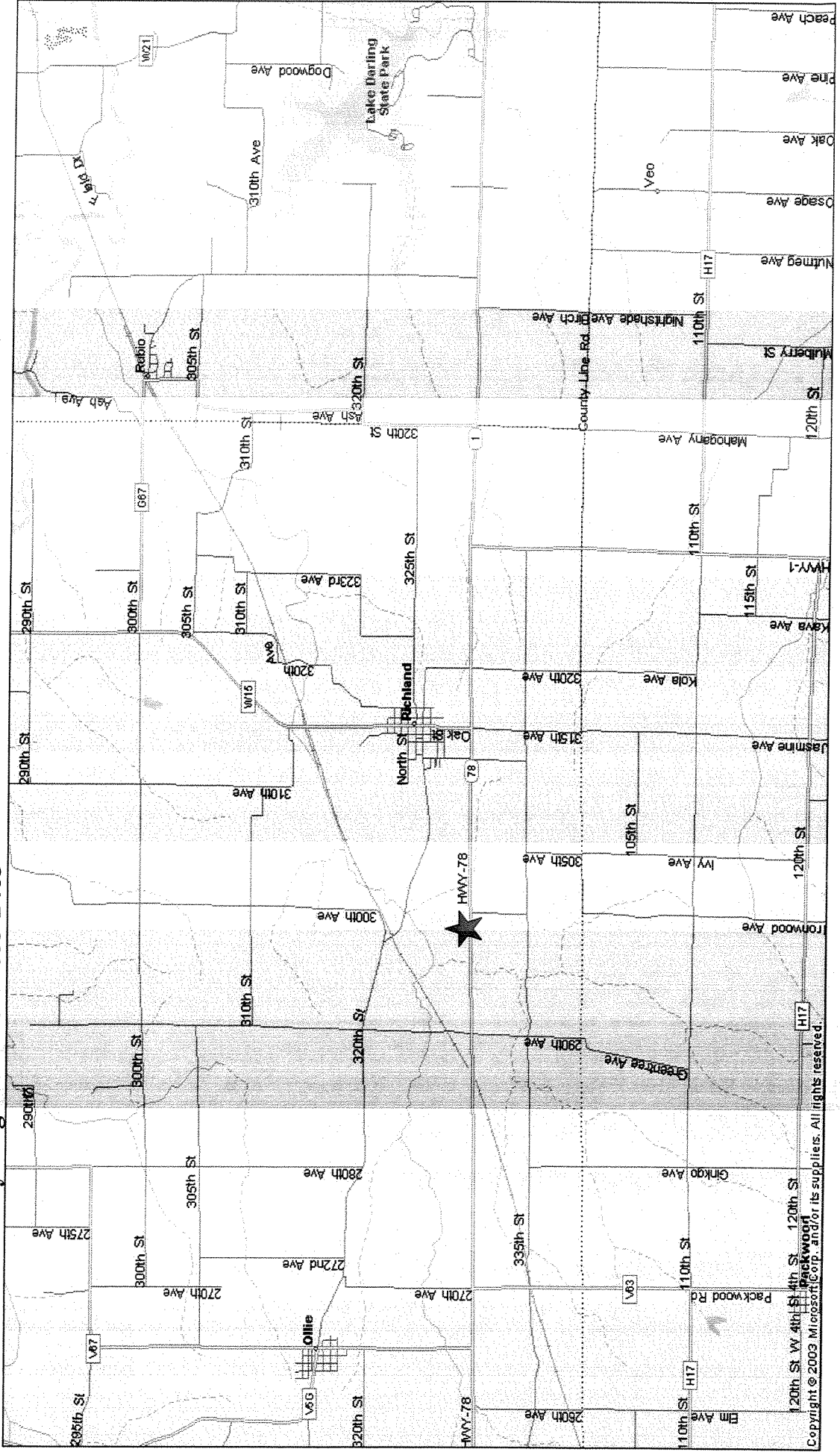


Washington County
Southeast Multi-County Solid Waste Agency (SEMCO)
29997 Hwy 78
Richland, Iowa 52585
319-456-6171

Appointment needed

Hours: Tuesday and Thursday 8:00 AM to 12:30 PM

All oils to Mark's Recycling Center 319-653-2463



Attachment Four

The Gazette **advertisements**

Indoor Air Quality

Run on 1/28/07; 2/11/07; and, 2/14/07

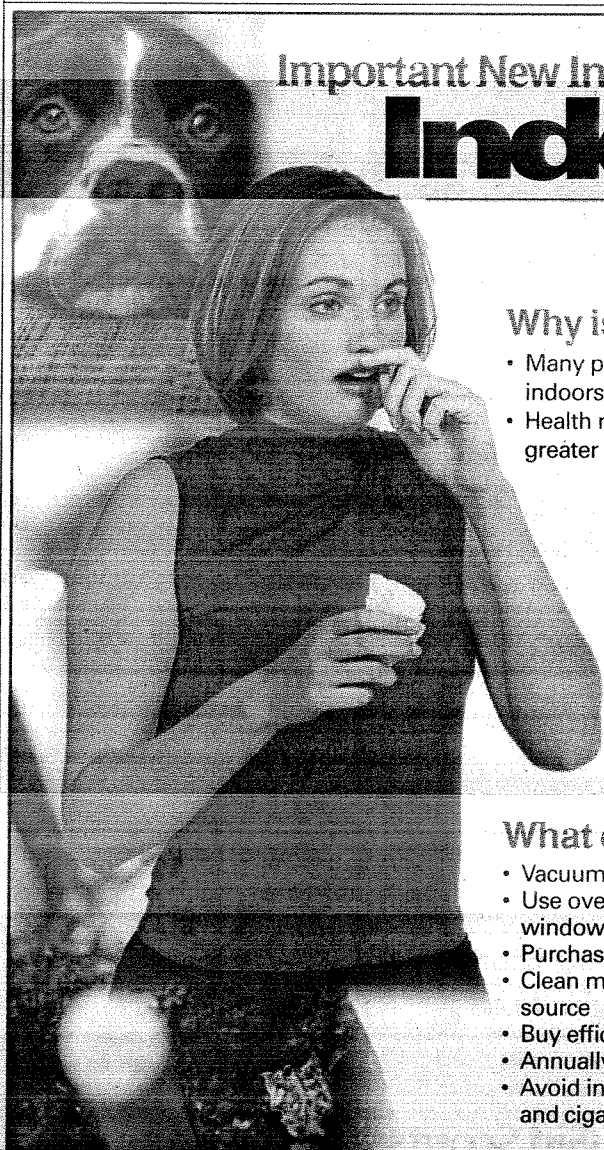
***Conserving Resources and Preventing
Pollution*** Run on 2/7/07



Thursday, February 1st at 5:30 p.m.
Wolfe Eye Clinic, 1245 2nd Avenue SE, Cedar Rapids
Todd W. Gothard, MD presenting

To register for the seminar or to schedule an evaluation
call 800-237-5393 or visit www.wolfeeyeclinic.com

Indoor Air
Quality 1-28-07 ar!



Important New Information about

Indoor Air Quality

Why is clean indoor air important?

- Many people spend 90% or more of their time indoors
- Health risks can be more serious because of greater exposure

What pollutes indoor air?

Dust, mold, allergens, smoke, radon, pesticides, lead, asbestos, pet hair and dander

How do indoor pollutants affect health?

- Immediate effects: irritation of eyes & nose, headaches, dizziness and fatigue
- Long term effects: asthma, pneumonia, humidifier fever, cancer and susceptibility to colds or other viral diseases

What can we do?

- Vacuum often
- Use oven and bathroom ventilators or open windows
- Purchase air filters
- Clean mold properly and eliminate moisture at the source
- Buy efficient appliances
- Annually clean or replace furnace filters
- Avoid inhaling smoke from wood burning stoves and cigarettes

For more information, please contact:



 The
Heritage Agency.

319-398-5559
or
800-332-5934

Saturday, February 17 starting at 11 a.m.

10,000 prize pool and \$20 entry fee. Stop by the
IsleOne Guest Service Center for all the details



1-800-THE ISLE • 1-800-4-YOU BET
Gambling a problem? There is help. And hope.
Call 1-800-BETS OFF.

Indoor Air
Quality 2-11-07

Responsible Play

Important New Information about

Indoor Air Quality

Why is clean indoor air important?

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or

800-332-5934



The
Heritage Agency.

Judi Dench

Dench, who's a best-actress nominee for her performance in "Notes on a Scandal."

Birthdays

TV news personality Hugh Downs is 86.

Actress Florence Henderson is 73.

Actress Meg Tilly is 47.

the Oscars because I'm going to have a knee operation," said

WASHINGTON (AP) — Rep. Charles Norwood, a Georgia dentist who rode the Republican tidal wave in 1994 that gave the GOP control of the House, died Tuesday after battling cancer and lung disease.

The 65-year-old Norwood died at his home in Augusta, Ga., his office said.



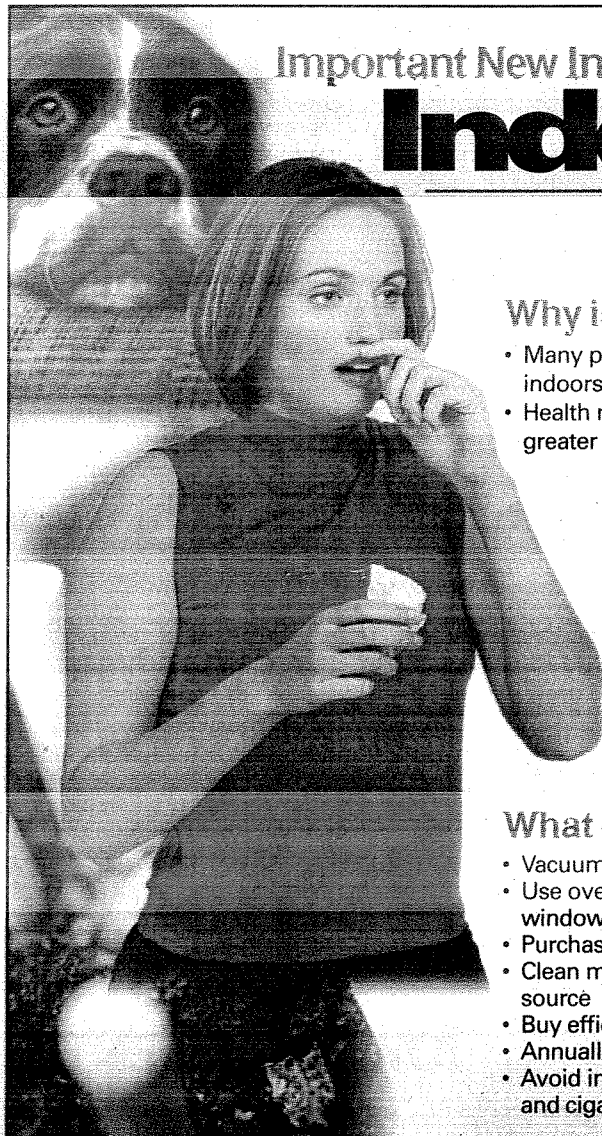
Rep. Charles Norwood
Dead at 65

Norwood suffered from chronic lung disease and later developed metastatic cancer that spread from his lung to his liver.

He had declined further treatment

last week and returned to Georgia.

Indoor Air
Quality 2-14-07



Important New Information about

Indoor Air Quality

Why is clean indoor air important?

- Many people spend 90% or more of their time indoors
- Health risks can be more serious because of greater exposure

What pollutes indoor air?

Dust, mold, allergens, smoke, radon, pesticides, lead, asbestos, pet hair and dander

How do indoor pollutants affect health?



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For more information, please contact:

319-398-5559
or
800-332-5934



The Heritage Agency.

urban counties," which were allowed to keep all their tax money before 2003.

Cedar Rapids schools Superintendent Dave Markward has noted the incentive is one reason the district sought the 10-year tax instead of a three- or five-year tax. The incentive for a five-year tax would have been in effect for 2.5 years instead of five — a difference that amounts to more than \$35 million for the 11 school districts in Linn County, 10 of which are using some of the extra money to offer property tax abatement if the sales tax passes.

Incentive dismissed

Mona Shaw, an Iowa City resident and member of the VoteNoSILO group, said the incentive is not reason enough to support a tax she believes hurts the poor.

"This election is driven by the fact that they (school officials) want to pass this tax so they don't have to share the appropriation with other counties," she said.

Imposed anyway?

But state Sen. Bob Dvorsky, D-Coralville, who worked with other Corridor lawmakers to get the incentive made into law, said the incentive ought to persuade voters in both counties to approve the tax.

If it doesn't, Linn and Johnson residents may end up with the SILO tax anyway. There's a strong push among legislators to implement the 1 percent sales tax for schools statewide, he said.

"If it shouldn't pass in Linn and Johnson, or either one, it's probably going to end up being imposed on them anyway," Dvorsky said. "Then they'd lose any incentive."

■ Contact the writer: (319) 339-3175 or gregg.hennigan@gazettecommunications.com

the YMCA's Keen Teens Club.

The wallet also contained two black-and-white snapshots, one of a girl who could be Barnes. The other shows a young man in what appears to be an Army Air Force uniform, probably Billy Clarke, whom Barnes was dating.


Barnes graduated in *Conserving Resources* 2-7-07
Barnes, a year ahead of his Navy leave in 1951.

(Now Joan Barnes)
1949 yearbook photo

The school, now a middle school, is mailing Barnes' wallet back to her, and she promises to return it for the school's archives.

"It was very much a surprise," she said. "Doesn't everybody remember their high ays, anyway?"

the writer: (319) 398-5819 or steve.gravelle@communications.com



Important New Information about **Conserving Resources and Preventing Pollution**

What are household hazardous wastes?

- Toxic (pesticides)
- Corrosive (acids or bases)
- Ignitable (paints & thinners, gasoline)
- Reactive (moth balls)

How can we prevent pollution?

- Stop creating pollutants by reducing the source
- Change what you use and what you do
- Store in the original container and do not use container for other purposes

What can we do?


- Look for excess household hazardous wastes that may contribute to existing or undiagnosed health problems or pose physical hazards
- Take household hazardous wastes to the local Regional Collection Center
- Educate others

For more information, please contact:

319-398-5559

or

800-332-5934





**The
Heritage Agency**

Attachment Five

Preparing Environmental Health & Safety Stewards Training Evaluation

Preparing Environmental Health & Safety Stewards
Delivered by
Kirkwood Community College
Training Evaluation

Course Title: Preparing EH&S Stewards Train the Trainer Instructor: _____

Participant Name: _____ Dates: _____

Institution: _____

Address: _____

City: _____

State: _____ Zip Code: _____

Phone Number: _____ Fax: _____

Name _____

Module 1 Environmental Health Hazards

1. **Training Objectives:** *Please rate your knowledge or skills, as defined by the course objectives, on a scale of 1 to 10, with 1 being limited knowledge or skill and 10 being a thorough knowledge or skill in the subject matter. Place a "B" on the line that best represents your knowledge of the material or skill level BEFORE the training and an "A" on the line that represents your knowledge or skill level AFTER completing the training.*

Before (B) and After (A) Rating

Limited		Need More Training										Thorough
1	2	3	4	5	6	7	8	9	10			

B _____

A _____

Training Terminal Learning Objectives

- | | | | | | | | | | | |
|----------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|---|---|----|
| 1. I can explain why Pharmaceutical & Personal Care Products (PPCP's) contribute to pollution. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2. I can describe some factors of how human and veterinarian pharmaceutical drugs effect water. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 3. I have the ability and skills to describe what acute and chronic effects of pesticides can have upon the elderly. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Name _____

Module 2 Safe Water and Air

3. Training Objectives: Please rate your knowledge or skills, as defined by the training objectives, on a scale of 1 to 10, with 1 being limited knowledge or skill and 10 being a thorough knowledge or skill in the subject matter. Place a "B" on the line that best represents your knowledge of the material or skill level BEFORE the training and an "A" on the line that represents your knowledge or skill level AFTER completing the training.

Before (B) and After (A) Rating

Limited	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10

<div>Before (B)</div> <div>_____</div> <div>After (A)</div> <div>_____</div>

Training Terminal Learning Objectives

I have the ability and skills to ascertain if airborne contaminants exist and pose further health problems with the elderly.

I have the ability and skills to describe what constitutes safe drinking water.

I have the ability and skills to identify common indoor air quality issues as it pertains to the elderly with healthcare issues.

1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10

Name _____

Module 3 Conserving Resources

5. Training Objectives: Please rate your knowledge or skills, as defined by the training objectives, on a scale of 1 to 10, with 1 being limited knowledge or skill and 10 being a thorough knowledge or skill in the subject matter. Place a "B" on the line that best represents your knowledge of the material or skill level BEFORE the training and an "A" on the line that represents your knowledge or skill level AFTER completing the training.

Before (B) and After (A) Rating

Limited		Need More Training				Thorough			
1	2	3	4	5	6	7	8	9	10

B _____	A _____
---------	---------

Training Terminal Learning Objectives

I can describe characteristics of the hazards of household hazardous waste.

I have the ability and skills to identify the key components in pollution prevention.

I have the ability and skills to list and identify options for household hazardous waste recycling.

1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10